

AMENDMENT

Kindly amend the application, without prejudice, as follows:

In the Claims:

1. (Currently Amended) A method of forming an electrical contact, comprising:

~~mounting a plurality of electrical contacts on a substrate plating a core wire with at least one conductive coating to form an electrical contact, the electrical contact experiencing internal stresses created by the at least one conductive coating; and~~

~~induction heating the electrical contacts for a predetermined period of time to heat different first and second portions of the electrical contacts by different first and second amounts at least partially relieve the internal stresses created by the at least one conductive coating.~~

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The method of claim 1 wherein said induction heating step includes reducing the internal stresses in the electrical contact unevenly between different first and second portions of the electrical contact such that heats the first portion of the electrical contact such that the first portion exhibits superior strength properties as compared to than the second portion , while and heats the second portion such that the second portion exhibits superior stress-relaxation properties as compared to than the first portion.

5. (Original) The method of claim 1, wherein said induction heating step includes generating a time-varying magnetic field through which the electrical contact is continuously moved.

6. (Original) The method of claim 1, wherein said induction heating step includes generating a magnetic field through which the electrical contact is indexed in a stepped manner.

7. (Original) The method of claim 1, further comprising: generating time-varying magnetic fields within an annealing region extending in a substantially parallel field direction and orienting the electrical contact during said induction heating step, such that a plane containing the electrical contact is parallel to the field direction.

8. (Original) The method of claim 1, further comprising: shaping the electrical contact to include a base portion and knee portion aligned within a common contact plane; and

passing said electrical contact through a magnetic field created in the induction heating step with the contact plane being aligned parallel to a direction of the magnetic field.

9. (Original) The method of claim 1, further comprising shaping the electrical contact with a flexible portion extending forward from a base portion of the electrical contact, and orienting the electrical contact such that the flexible portion enters magnetic fields created during the induction heating step before the base portion enters the magnetic fields.

10. (Original) The method of claim 1, further comprising: orienting the electrical contact such that one end of the electrical contact is exposed to higher intensity magnetic fields created during the induction heating step and such that an opposite end of the electrical contact is exposed to weaker intensity magnetic fields.

11. (Original) The method of claim 1, further comprising, during the induction heating step, passing the electrical contact through a magnetic field having a field intensity gradient extending along a length of the electrical contact.

12. (Original) The method of claim 1, wherein the induction heating step includes creating a time-varying magnetic field having a field intensity gradient extending in a first direction, and passing said electrical contact through said magnetic field in a conveyance direction perpendicular to said first direction.

13. (Currently Amended) A method for fabricating a ~~micro~~ contact component, comprising:

~~electroplating a metallic coating on a plurality of core wires to form micro contacts;~~

mounting a plurality of said micro contacts onto a substrate, said substrate being insensitive to magnetic fields; and

induction heating said micro-contacts by different first and second amounts and without induction heating said substrate to anneal said micro contacts.

14. (Currently Amended) The method of claim 13, further comprising orienting said plurality of micro-contacts such that a central flexible portion of each of said micro-contacts first entering an induction field created during said induction heating step before a remaining portion of each of said micro-contacts enters the induction field.

15. (Currently Amended) The method of claim 13, further comprising orienting said plurality of micro-contacts such that a contact plane of each of each of said micro-contacts is parallel to a direction of magnetic fields created during said induction heating step.

16. (Cancelled)

17. (Currently Amended) The method of claim 13, wherein said induction heating step includes reducing internal stresses in each of the micro contacts by a first amount in first portions of each micro-contact and by a different second amount in second portions of each of said micro-contacts, such that the first portion of each of the micro contacts exhibits superior strength properties as compared to than the second portion, while the second portion of each of the micro-contacts exhibits superior stress relaxation properties as compared to than the first portion.

18. (Currently Amended) The method of claim 13, wherein said induction heating step includes generating a time-varying magnetic field extending in a field direction and passing said micro-contacts through said magnetic field along a conveyance direction perpendicular to the field direction.

19. (Cancelled)
20. (Cancelled)
21. (Cancelled)
22. (Cancelled)
23. (Cancelled)
24. (Cancelled)
25. (Cancelled)
26. (Cancelled)
27. (Cancelled)
28. (Cancelled)